

Serial No. 09/664,565

Page 2 of 12

IN THE CLAIMS:

Please amend the claims as follows:

1-8. (Cancelled)

9. (Currently Amended) A method for configuring a router in a communication network using an Open Shortest Path First (OSPF) protocol, comprising:

(a) determining that the router is not physically or virtually connected to a backbone area of the network or an area border router (ABR) of the network;

(b) establishing at least one physical link from the router to at least one non-ABR or at least one ABR of the network;

(c) establishing a virtual link from the router to ~~the~~ a backbone router in the backbone area through the at least one non-ABR and at least one ABR of an area associated with the at least one non-ABR when, at the step (b), said physical link is established to the at least one non-ABR; and

(d) establishing a virtual link from the router to ~~the~~ a backbone router in the backbone area through the at least one ABR when, at the step (b), the physical link is established to the at least one ABR.

10. (previously presented) The method of claim 9 wherein at least one of the steps (a), (c), and (d) further comprises:

using a network management system (NMS).

11. (previously presented) The method of claim 9 wherein the step (b) further comprises:

establishing the physical links having minimal network latencies.

12. (previously presented) The method of claim 9 wherein the step (c) further comprises:

establishing the virtual link from the at least one ABR to the backbone.

Serial No. 09/664,565

Page 3 of 12

13. (previously presented) The method of claim 9 wherein the step (d) further comprises:

establishing the virtual link from the at least one ABR to the backbone.

14. (Currently Amended) A method for configuring a communication network using an Open Shortest Path First (OSPF) protocol, comprising:

grouping routers of the network to form at least one routing domain, each routing domain including a plurality of neighboring routers;

forming in each routing domain at least one area border router (ABR) having at least one physical link to at least one of a backbone area of the network and/or and a router of other routing domain of the network; and

configuring the routers using the steps of:

(a) determining that a router is not physically or virtually connected to [[a]] the backbone area of the network or the ABR of the network;

(b) establishing at least one physical link from the router to at least one non-ABR or at least one ABR of the network;

(c) establishing a virtual link from the router to ~~the~~ a backbone router in the backbone area through the at least one non-ABR and at least one ABR of an area associated with the at least one non-ABR when, at the step (b), the physical link is established to the at least one non-ABR; and

(d) establishing a virtual link from the router to ~~the~~ a backbone router in the backbone area through the at least one ABR when, at the step (b), the physical link is established to the at least one ABR.

15. (previously presented) The method of claim 14 wherein at least one of the steps (a), (c), and (d) further comprises:

using a network management system (NMS).

16. (previously presented) The method of claim 14 wherein the step (b) further comprises:

establishing the physical links having minimal network latencies.

376215-1

Serial No. 09/664,565

Page 4 of 12

17. (previously presented) The method of claim 14 wherein the step (c) further comprises:

establishing the virtual link from the at least one ABR to the backbone.

18. (previously presented) The method of claim 14 wherein the step (d) further comprises:

establishing the virtual link from the at least one ABR to the backbone.